

BHAVANA CK

1BM20CS403

CSE-4A

Program 6 : Order Database

Consider the following schema for Order Database:

SALESMAN (*Salesman_id, Name, City, Commission*)

CUSTOMER (*Customer_id, Cust_Name, City, Grade, Salesman_id*)

ORDERS (*Ord_No, Purchase_Amt, Ord_Date, Customer_id, Salesman_id*)

Write SQL queries to

- 1. Count the customers with grades above Bangalore's average.**
- 2. Find the name and numbers of all salesmen who had more than one customer.**
- 3. List all salesmen and indicate those who have and don't have customers in their cities (Use UNION operation.)**
- 4. Create a view that finds the salesman who has the customer with the highest order of a day.**
- 5. Demonstrate the DELETE operation by removing salesman with id 1000. All his orders must also be deleted.**

```
create database Orderdb;  
use Orderdb;
```

```
create table Salesman(  
    salesman_id int not null,  
    salesman_name varchar(20) not null,  
    city varchar(20) not null,  
    commission int not null,  
    primary key(salesman_id)  
);
```

```
create table Customer(  
    customer_id int not null,  
    cust_name varchar(20) not null,  
    city varchar(20) not null,  
    grade int not null,  
    salesman_id int not null,  
    primary key(customer_id)  
);
```

```
customer_id int not null,  
customer_name varchar(20) not null,  
city varchar(20) not null,  
grade int not null,  
salesman_id int,  
primary key(customer_id),  
foreign key(salesman_id)references Salesman(salesman_id) on  
delete set null  
);
```

```
create table Orders(  
order_id int not null,  
purchase_amt int not null,  
order_date date not null,  
customer_id int not null,  
salesman_id int,  
primary key(order_id),  
foreign key(customer_id)references Customer(customer_id),  
foreign key(salesman_id)references Salesman(salesman_id) on  
delete set null  
);
```

```
insert into Salesman  
values(1000,'John','Bangalore',25),  
(2000,'Ravi','Bangalore',20),  
(3000,'Kumar','Mysore',15),  
(4000,'Smith','Delhi',30),  
(5000,'Harsha','Hyderabad',15);
```

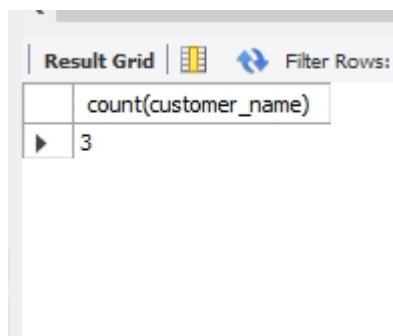
```
insert into Customer  
values(10,'Preethi','Bangalore',100,1000),  
(11,'Vivek','Mangalore' ,300,1000),  
(12,'Bhaskar','Chennai',400,2000),
```

```
(13,'Chethan','Bangalore',200,2000),  
(14,'Mamatha','Bangalore',400,3000);
```

```
insert into Orders  
values(50,5000,'2017-05-04',10,1000),  
(51,450,'2017-01-20',10,2000),  
(52,1000,'2017-02-24',13,2000),  
(53,3500,'2017-04-13',14,3000),  
(54,550,'2017-03-09',12,2000);
```

----- Count the customers with grades above Bangalore's average.

```
select count(customer_name) from Customer where grade >  
(Select avg(grade) from Customer where city = 'Bangalore');
```



The screenshot shows a 'Result Grid' window with a 'Filter Rows' button. The grid contains one row with the column header 'count(customer_name)' and a value of 3.

count(customer_name)
3

----- Find the name and numbers of all salesmen who had more than one customer.

```
select distinct c.salesman_id, s.salesman_name from  
Customer c, Salesman s  
where c.salesman_id = s.salesman_id  
and 1 < (select count(customer_id) from Customer where  
salesman_id = c.salesman_id);
```

Result Grid		Filter Rows:
	salesman_id	salesman_name
▶	2000	Ravi

----- List all salesmen and indicate those who have and don't have customers in their cities (Use UNION operation.)

```
select s.salesman_name,c.customer_name from Salesman
s,Customer c
where s.salesman_id=c.salesman_id and c.city=s.city
union
select s.salesman_name,'No Match' from Salesman
s,Customer c
where s.salesman_id = c.salesman_id and c.city!=s.city;
```

Result Grid		Filter Rows:
	salesman_name	customer_name
▶	Ravi	Chethan
	Ravi	No Match
	Kumar	No Match

-----Create a view that finds the salesman who has the customer with the highest order of a day.

```
create view salesman_view as
select o.order_date ,salesman_id,sum(o.purchase_amt)from
Orders o group by order_date
having sum(purchase_amt)=(select
max(sum(purchase_amt))from Customer
```

where order_date =o.order_date and salesman_id
=o.salesman_id);

	order_date	salesman_id	sum(o.purchase_amt)
▶	2017-01-20	2000	450
	2017-02-24	2000	1000
	2017-04-13	3000	3500
	2017-03-09	2000	550

-----Demonstrate the DELETE operation by removing salesman with id 1000.
All his orders must also be deleted.

delete from Salesmn where salesman_id=1000;
select*from Salesman;
select * from Orders;

Result Grid				
	salesman_id	salesman_name	city	commission
▶	2000	Ravi	Bangalore	20
	3000	Kumar	Mysore	15
	4000	Smith	Delhi	30
	5000	Harsha	Hyderabad	15
*	NULL	NULL	NULL	NULL

Result Grid					
	order_id	purchase_amt	order_date	customer_id	salesman_id
▶	50	5000	2017-05-04	10	NULL
	51	450	2017-01-20	10	2000
	52	1000	2017-02-24	13	2000
	53	3500	2017-04-13	14	3000
	54	550	2017-03-09	12	2000
*	NULL	NULL	NULL	NULL	NULL